SMC Barricade™ Routers

User Guide

SMC7004BR

V1.0

English

Congratulations on your purchase of the SMC Barricade™.

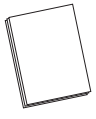
The SMC Barricade is a Broadband Router designed to share Internet Access, provide security, and to network multiple devices for a variety of users. The Barricade's simple installation setup can be used by the least experienced of users, while providing networking professionals with easy to configure advanced features. Please read the User Guide for advanced features of this product.

Thank you for purchasing an SMC product, we know you will enjoy the many features of the SMC Barricade.

This Package Contains

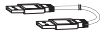
One SMC Barricade

One Power Adapter



This Quick Installation Guide

One Installation CD



One Category 5 Fast Ethernet Cable

Hardware Setup

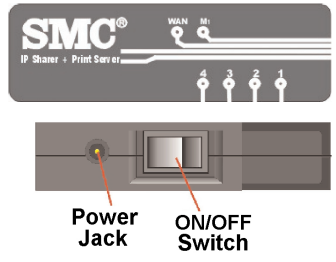
1. **Connecting Computers:** Connect all of your computers to the Barricade on ports **1-4**, **1-7**, or **1-15**, depending on which Barricade you purchased. If you have more computers than ports, connect a hub or a switch (using its uplink port) and connect additional computers to that device.

2. **Connecting Cable Modems and DSL Modems:** Connect your Cable or DSL modem to the **WAN** port.

3. **Connecting a Dial-up Modem:** Connect your external dial-up modem or ISDN modem to the **COM** port.

4. **Connecting Printer** (optional): Connect your printer to the **PRINT** port using a standard paralell printer cable.

5. **Power:** Plug in the power adapter and turn on the Barricade with the **ON/OFF** switch. After the self-test, the M1 light will flash once every second, indicating normal operation.

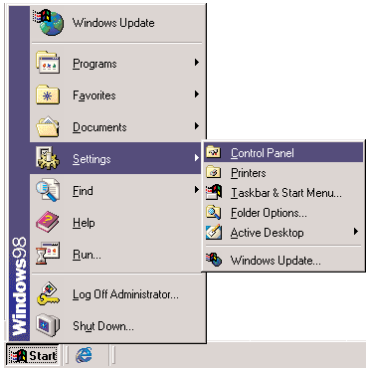


English

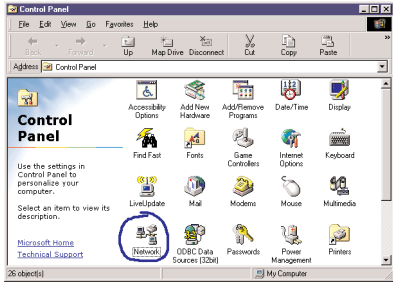
English

Configuring Your Computer with Windows 95/98/ME

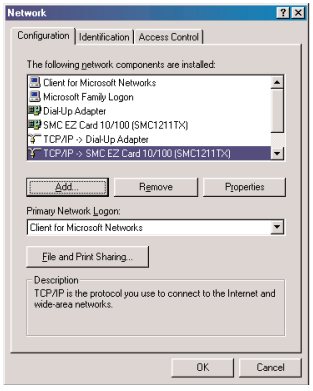
1. From the Windows desktop, click the "Start" button. Choose "Settings", then "Control Panel."



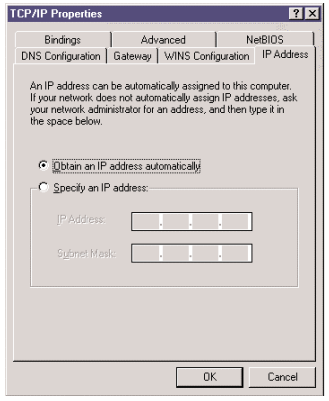
2. From "Control Panel" Double-click the "Network" icon.



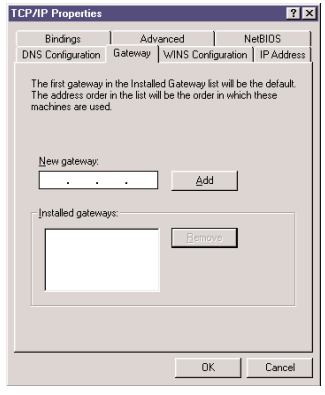
3. In the "Network" window, under the "Configuration" tab, double-click the "TCP/IP" that is listed with your network card.



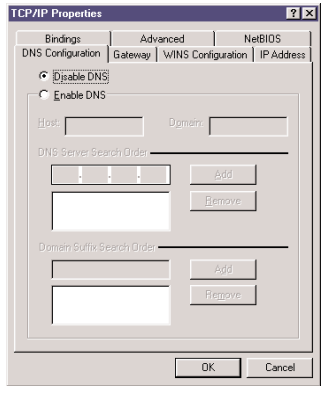
4. Select the "IP Address" tab. Click "Obtain an IP address automatically."


TCP/IP Properties
Bindings
Advanced
NetBIOS
DNS Configuration
Gateway
WINS Configuration
IP Address
An IP address can be automatically assigned to this computer. If your network does not automatically assign IP addresses, ask your network administrator for an address, and then type it in the space below.
Obtain an IP address automatically
Specify an IP address:
IP Address:
Subnet Mask:
OK
Cancel

5. Click the "Gateway" tab. If there are any "Installed Gateways" listed, highlight each one and click "Remove."



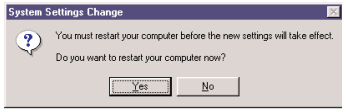
6. Click the "DNS Configuration" tab, and then select "Disable DNS." Click the "OK" button.



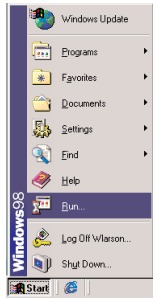
English

English

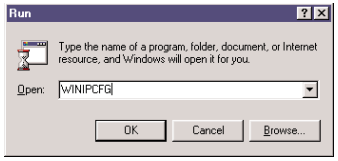
7. Click the “OK” button in the “Network” window. Windows may copy some files, then will prompt you to restart your system. Click “Yes” and your computer will shut down and restart.


System Settings Change
You must restart your computer before the new settings will take effect.
Do you want to restart your computer now?
Yes
No

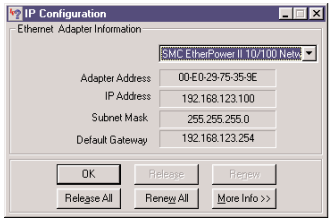
8. Once your computer has restarted, click “Start”, and then “Run...”



9. Type “WINIPCFG” and click “OK.” It may take a minute or two for the “IP Configuration” window to appear

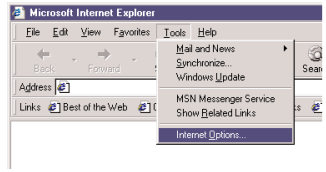


10. From the drop-down menu, select your network card. Click “Release” and then “Renew.” Your “IP Address” should now be similar to the Barricade (i.e. 192.168.123.xxx). Click “OK” to close the “IP Configuration” window.



11. Open your web browser (i.e. Internet Explorer or Netscape Navigator).

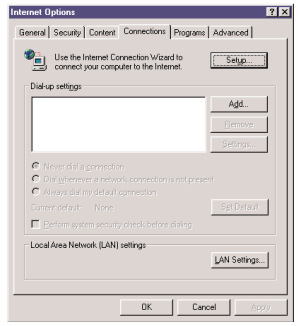
12. Clear all proxy settings:



a. For Internet Explorer:

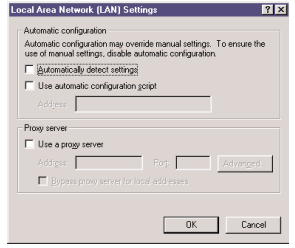
i. Click “Tools”, then “Internet Options.”

ii. In the “Internet Options” window click the “Connections” tab. Next, click the “LAN Settings...” button.



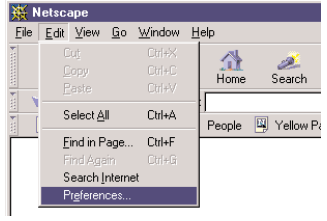
iii. Clear all the checkboxes.

iv. Click “OK”, and then click “OK” again to close the “Internet Options” window.



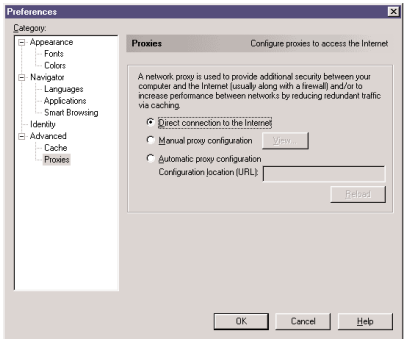
b. For Netscape Navigator:

i. Click “Edit”, then click “Preferences...”



English

ii. In the "Preferences" window, under "Category" double-click "Advanced", then click "Proxies". Select "Direct connection to the internet." Click "OK"



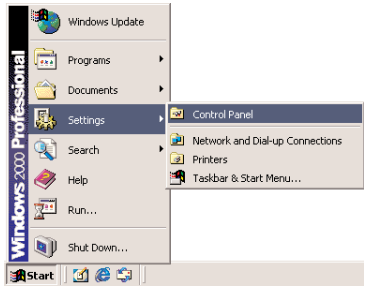
13.Repeat these steps for each Windows 95/98/Me computer connected to your Barricade

Configuring Your Barricade

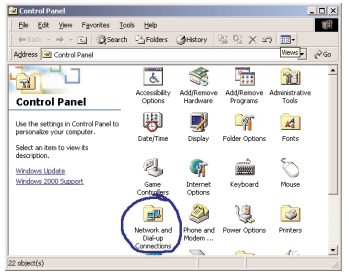
If you connect to the Internet using a:
Cable Modem, turn to page 13
DSL Modem, turn to page 15
DSL Modem via PPP over Ethernet, turn to page 17

Configuring Your Computer with Windows 2000

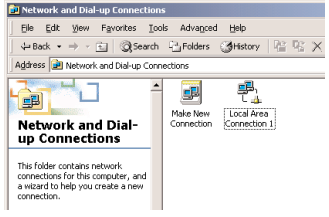
1. From the Windows desktop, click the "Start" button. Choose "Settings", then "Control Panel."



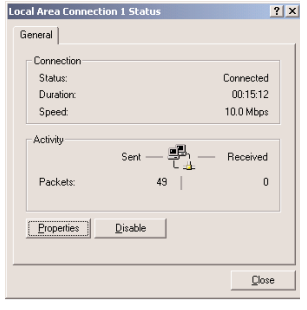
2. Double-click the "Network & Dial-Up Connections" icon.



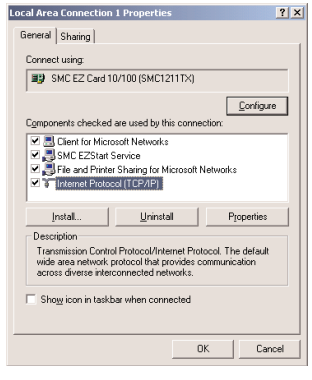
3. Double-click the icon that corresponds to the connection to your Barricade



4. Click "Properties."

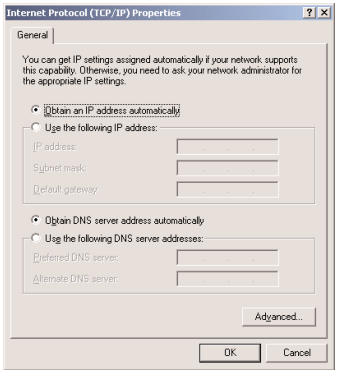


5. Double-click "Internet Protocol (TCP/IP)."

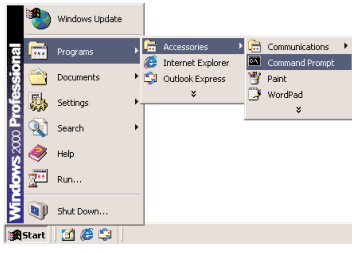


English

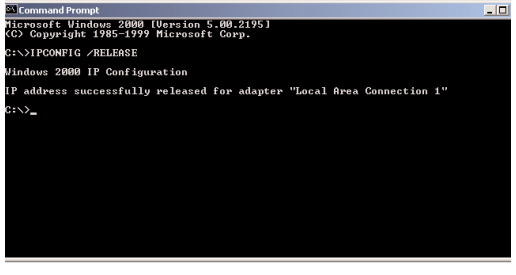
6. Select “Obtain an IP address automatically” and then select “Obtain DNS server address automatically.” Then click “OK.” Click “OK” or “Close” to close each window.

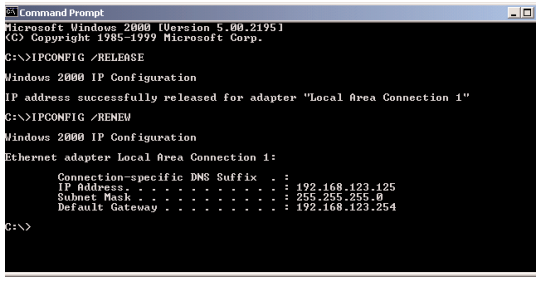

Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

7. From the Windows desktop, click the “Start” button, then “Programs”, then “Accessories”, and then click “Command Prompt.”

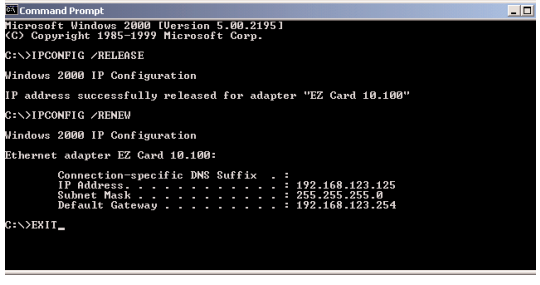


8. In the “Command Prompt” window, type “IPCONFIG /RELEASE” and press the <ENTER> key.


Command Prompt
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-1999 Microsoft Corp.
C:\>IPCONFIG /RELEASE
Windows 2000 IP Configuration
IP address successfully released for adapter "Local Area Connection 1"
C:\>


Command Prompt
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-1999 Microsoft Corp.
C:\>IPCONFIG /RELEASE
Windows 2000 IP Configuration
IP address successfully released for adapter "Local Area Connection 1"
C:\>IPCONFIG /RENEW
Windows 2000 IP Configuration
Ethernet adapter Local Area Connection 1:
Connection-specific DNS Suffix . :
IP Address. . . . . : 192.168.123.125
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.123.254
C:\>

9. Type “IPCONFIG /RENEW” and press the <ENTER> key. Your “IP Address” should now be similar to the Barricade (i.e. 192.168.123.xxx).


Command Prompt
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-1999 Microsoft Corp.
C:\>IPCONFIG /RELEASE
Windows 2000 IP Configuration
IP address successfully released for adapter "EZ Card 10.100"
C:\>IPCONFIG /RENEW
Windows 2000 IP Configuration
Ethernet adapter EZ Card 10.100:
Connection-specific DNS Suffix . :
IP Address. . . . . : 192.168.123.125
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.123.254
C:\>EXIT

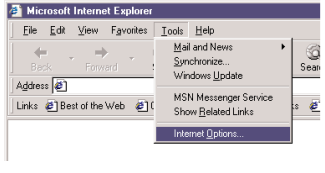
10. Type “EXIT” and press <ENTER> to close the “Command Prompt” window.

11. Open your web browser (i.e. Internet Explorer or Netscape Navigator).

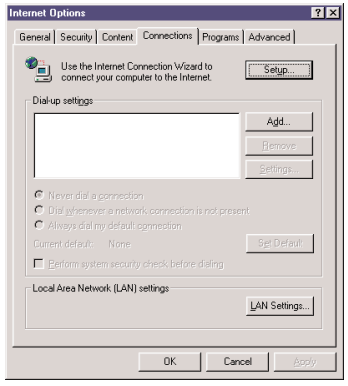
12. Clear all proxy settings:

a. For Internet Explorer:

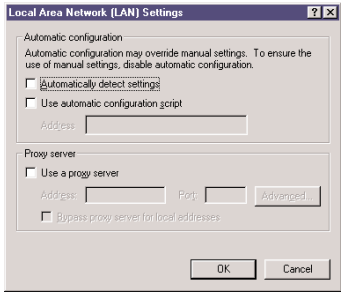
i. Click “Tools”, then “Internet Options.”



ii. In the “Internet Options” window click the “Connections” tab. Next, click the “LAN Settings...” button.

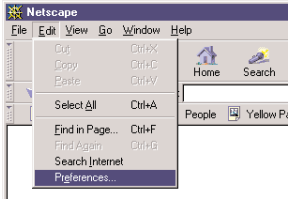


iii. Clear all the checkboxes and click “OK.” Click “OK” again to close the “Internet Options” window.

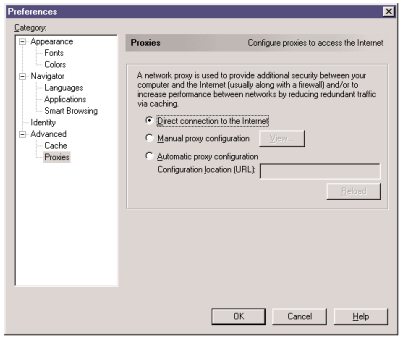


b. For Netscape Navigator:

i. Click “Edit”, then click “Preferences...”



ii. In the “Preferences” window, under “Category” double-click “Advanced”, then click “Proxies”. Select “Direct connection to the internet.” Click “OK.”



13. Repeat these steps for each computer connected to your Barricade.

Configuring Your Barricade

If you connect to the Internet using a:
Cable Modem, turn to page 13
DSL Modem, turn to page 15
DSL Modem with a Log In name and Password, turn to page 17

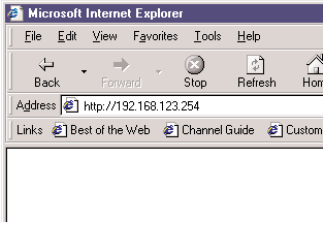
English

English

English

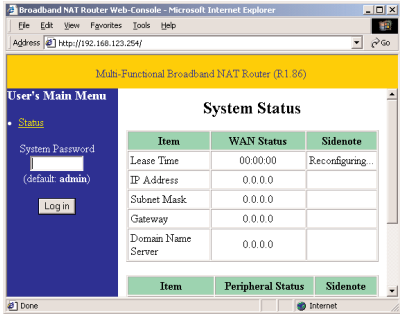
Configuring Your Barricade for a Cable Modem

1. Open your web browser (i.e. Internet Explorer or Netscape Navigator).

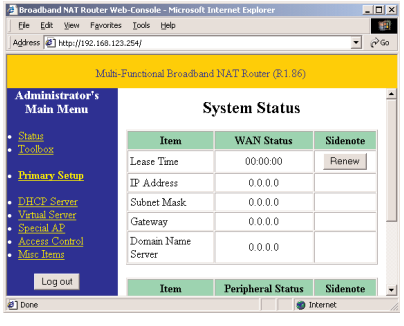

Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Forward Stop Refresh
Address http://192.168.123.254
Links Best of the Web Channel Guide Custom

2. In the "Location" field (for Netscape) or "Address" field (for Internet Explorer), type "http://192.168.123.254" and press <ENTER>.

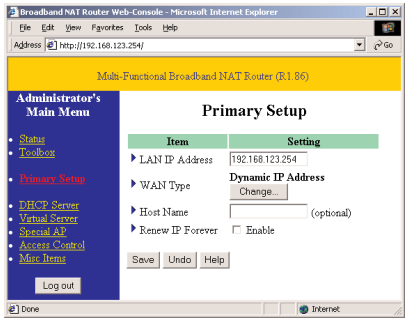
3. In the "System Status" page of the Barricade web console, type your password in the "System Password" field (default is "admin") and click the "Log In" button.



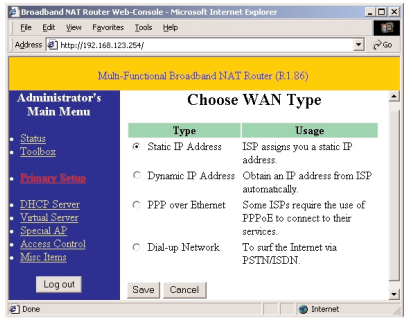
4. Click "Primary Setup"



5. Under "WAN Type" Click the "Change..." button.



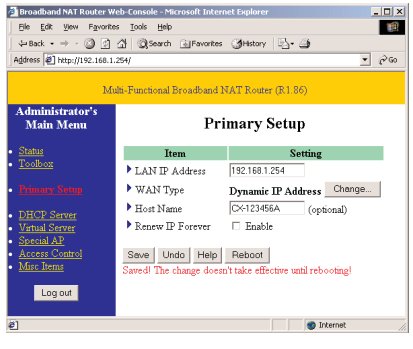
6. Select "Dynamic IP Address" and click the "Save" button.


Broadband NAT Router Web-Console - Microsoft Internet Explorer
Multi-Functional Broadband NAT Router (R1.86)
Administrator's Main Menu
Choose WAN Type
Type Usage
Static IP Address ISP assigns you a static IP address.
Dynamic IP Address Obtain an IP address from ISP automatically.
PPP over Ethernet Some ISPs require the use of PPPoE to connect to their services.
Dial-up Network To surf the Internet via PSTN/ISDN.
Save Cancel
Log out

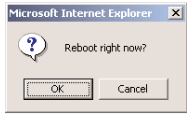
7. Key in your "Host Name" if your Internet Service Provider has given you one (i.e. CX123456-A).

8. Click "Save", and then click the "Reboot" button.

9. When prompted to reboot now, click "OK."


Broadband NAT Router Web-Console - Microsoft Internet Explorer
Multi-Functional Broadband NAT Router (R1.86)
Administrator's Main Menu
Primary Setup
Item Setting
LAN IP Address 192.168.1.254
WAN Type Dynamic IP Address Change...
Host Name CX-123456A (optional)
Renew IP Forever Enable
Save Undo Help Reboot
Saved! The change doesn't take effective until rebooting!
Log out

10. Once the Barricade is rebooted, you can surf the Internet as you normally would from all computers connected to it.

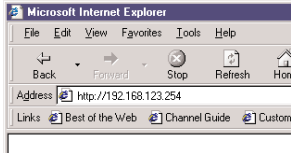


English

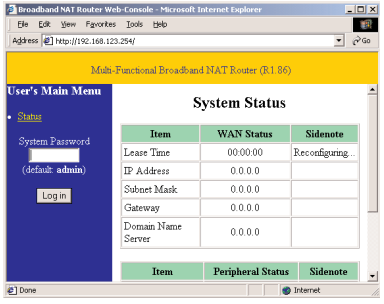
Configuring Your Barricade for a DSL Modem

English

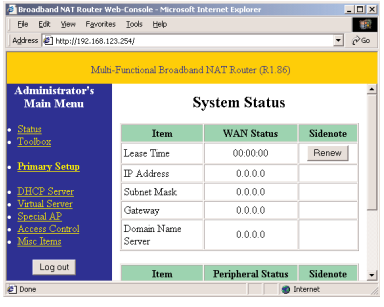
1. Open your web browser (i.e. Internet Explorer or Netscape Navigator).


Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Forward Stop Refresh
Address http://192.168.123.254
Links Best of the Web Channel Guide Custom

2. In the "Location" field (for Netscape) or "Address" field (for Internet Explorer), type "http://192.168.123.254" and press <ENTER>.

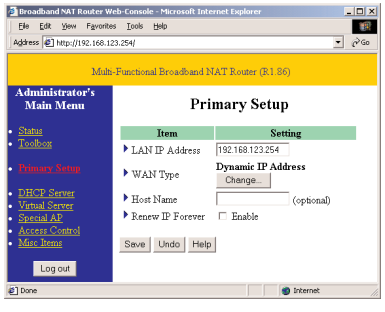


3. In the "System Status" page of the Barricade web console, type your password in the "System Password" field (default is "admin") and click the "Log In" button.

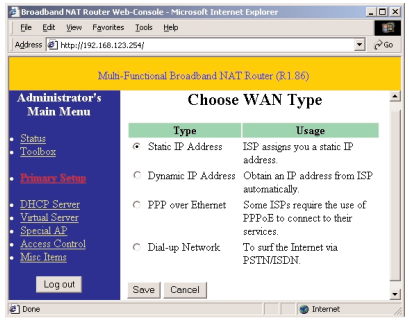


4. Click "Primary Setup"

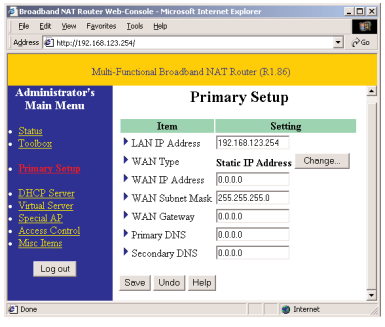
5. Under "WAN Type" Click the "Change..." button.



6. Select "Static IP Address" and click the "Save" button.

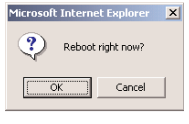

Broadband NAT Router Web-Console - Microsoft Internet Explorer
Multi-Functional Broadband NAT Router (R1.86)
Administrator's Main Menu
Status
Toolbox
Primary Setup
DHCP Server
Virtual Server
Special AP
Access Control
Misc Items
Log out
Choose WAN Type
Type Usage
Static IP Address ISP assigns you a static IP address.
Dynamic IP Address Obtain an IP address from ISP automatically.
PPP over Ethernet Some ISPs require the use of PPPoE to connect to their services.
Dial-up Network To surf the Internet via PSTN/ISDN.
Save Cancel

7. In the spaces provided, key in the values provided to you by your ISP. (Note: Enter the IP Address given to you in the "WAN IP Address" field, not the "LAN IP Address" field.)



8. Click "Save", and then click the "Reboot" button.

9. When prompted to reboot now, click "OK."



10. Once the Barricade is rebooted, you can surf the Internet as you normally would from all computers connected to it.

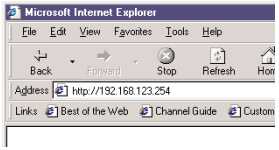
English

English

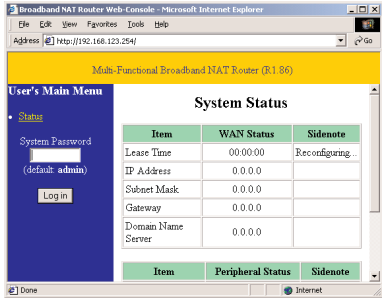
Configuring Your Barricade for a DSL Modem with a Log-In Name and Password

1. Open your web browser (i.e. Internet Explorer or Netscape Navigator).

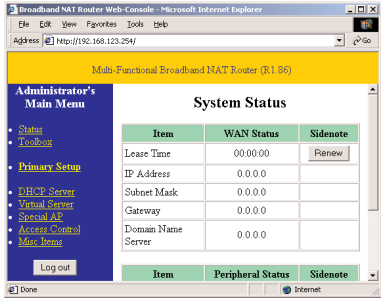
2. In the “Location” field (for Netscape) or “Address” field (for Internet Explorer), type “http://192.168.123.254” and press <ENTER>.


Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Forward Stop Refresh
Address http://192.168.123.254
Links Best of the Web Channel Guide

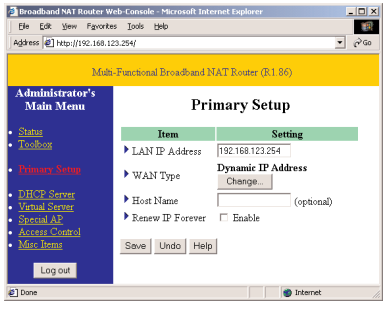
3. In the ”System Status” page of the Barricade web console, type your password in the “System Password” field (default is “admin”) and click the “Log In” button.



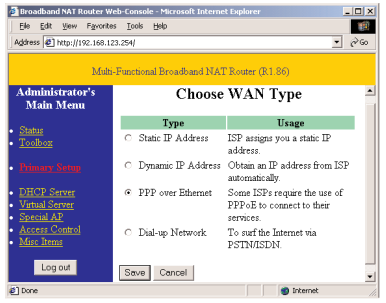
4. Click “Primary Setup”



5. Under “WAN Type” Click the “Change...” button.



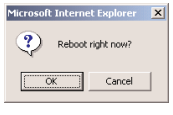
6. Select “PPP over Ethernet” and click the “Save” button.



7. Key in your Account Name and Password in the appropriate fields. If your ISP has supplied you with a Service Name, enter it in the “Service Name” field; otherwise, leave it blank.

8. Click “Save”, and then click the “Reboot” button.

9. When prompted to reboot now, click “OK.”



10. Once the Barricade is rebooted, you can surf the Internet as you normally would from all computers connected to it.

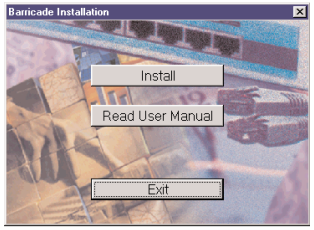
English

English

Installing and Configuring the Print Server

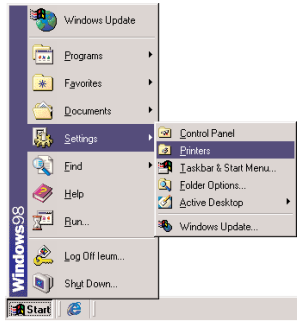
If you are not connecting your printer to your Barricade, skip this section.

1. Insert the installation CD into the CD-ROM drive. The installation screen will automatically appear. (If it doesn't, please click "Start", and then "Run..." Then type <CD-ROM Drive>":\install.exe" and click "OK." .)

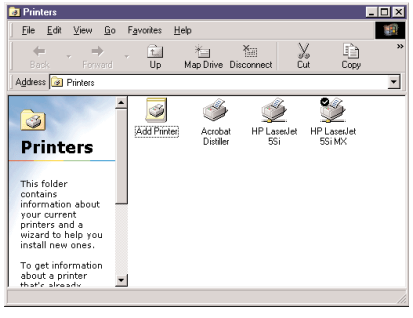


2. Click the "Install" button. Follow the prompts on the screen. After rebooting your computer, the software installation is complete, but your computer must still be configured.

3. Click "Start", click "Settings", and then select "Printers."



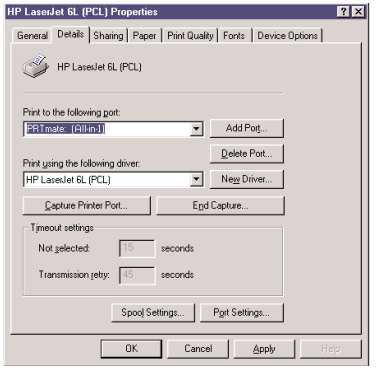
4. Right click the printer connected to the Barricade, then click "Properties."


Printers
File Edit View Go Favorites Help
Back Forward Up Map Drive Disconnect Cut Copy
Address Printers
Printers
This folder contains information about your current printers and a wizard to help you install new ones.
To get information about a printer
Add Printer
Acrobat Distiller
HP LaserJet 5Si
HP LaserJet 5Si MX

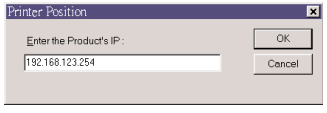
5. Click the "Details" tab.

6. Under "Print to the following port:", select "PRTmate: (All-in-1)."

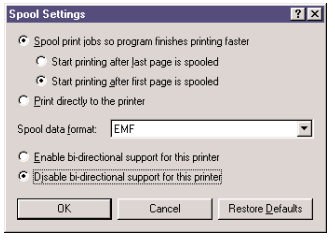
7. Click "Port Settings."



8. Enter the Barricade IP Address (default is 192.168.123.254) and click "OK."



9. Click "Spool Settings..." and, if available, select "Disable bi-directional support for this printer" and click "OK"


Spool Settings
Spool print jobs so program finishes printing faster
Start printing after last page is spooled
Start printing after first page is spooled
Print directly to the printer
Spool data format: EMF
Enable bi-directional support for this printer
Disable bi-directional support for this printer
OK
Cancel
Restore Defaults

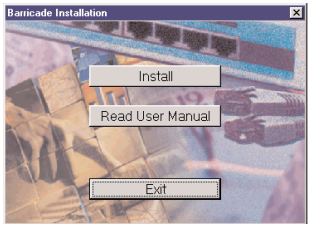
10. Click "OK" to close the printer details window.

11. Your computer is now configured to print via the Barricade Print Server. Repeat these steps on each computer connected to the Barricade.

English

Using the CD

Insert the CD into your CD-ROM drive. The installation screen will automatically appear. (If it doesn't, please click "Start", and then "Run..." Then type <CD-ROM Drive>":\install.exe" and click "OK.")



A. To install the print server software: Please refer to section **"Installing and Configuring the Print Server"** in this guide. **Note:** If you are not connecting your Barricade to a printer, you do not need to install the print server software.

B. To read the User Guide: Click on "Read User Manual." (Note: you must have Adobe Acrobat Reader installed before viewing the manual. If you do not have it, you can install it from the CD. To install it, click "Start", then "Run..." and type <CD-ROM Drive>:\viewer\rs405eng.exe.)

English

Troubleshooting

Here are some things to try if, after following the steps in this guide, you still have problems with:

Connecting to the Internet

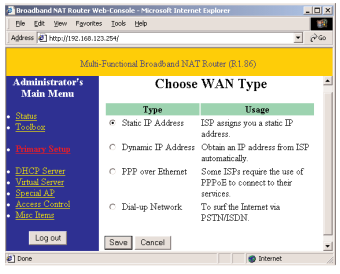
How do I find out which WAN type to select?
Use the following general rules to determine which WAN type your ISP uses:

A. If your ISP has given you a specific "IP Address", select "Static IP."

B. If use a Username and a Password to log in to your service, select "PPP over Ethernet."

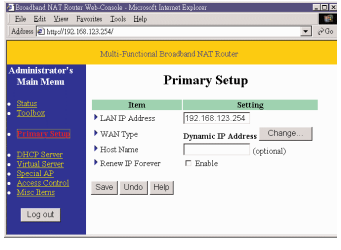
C. If you use an external dial-up modem connected to your Barricade, select "Dial-up Network."

D. If your ISP has given you a "host-name", select "Dynamic IP Address."



I can't access the Internet through my Barricade.
Depending on your Internet Service Provider (ISP), there are settings that you must change in order to connect to the Internet.

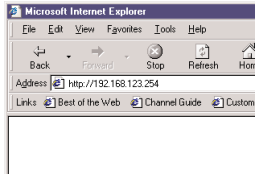
A. If you subscribe to an "@Home" service and have a dynamic IP address, you will need to enter a "host name." If your ISP does not require a host name, you must leave this field blank. To enter your host name:



English

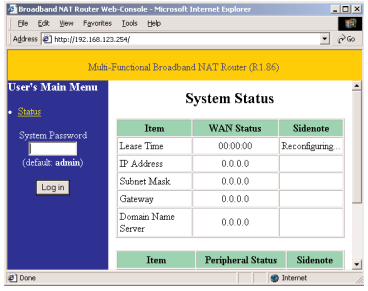
English

1. Open your web browser (i.e. Internet Explorer or Netscape Navigator).

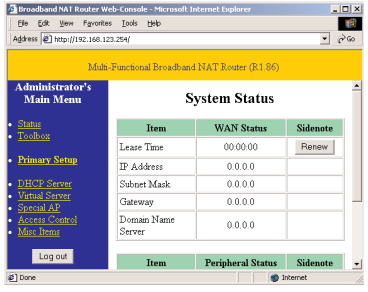

Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Forward Stop Refresh
Address http://192.168.123.254
Links Best of the Web Channel Guide Custom

2. In the "Location" field (for Netscape) or "Address" field (for Internet Explorer), type "http://192.168.123.254" and press <ENTER>.

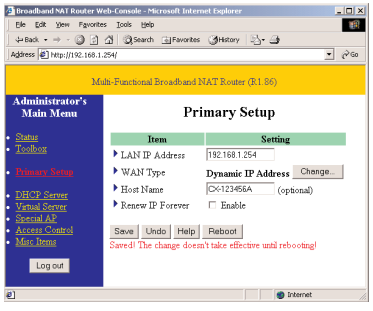
3. In the "System Status" page of the Barricade web console, type your password in the "System Password" field (default is "admin") and click the "Log In" button.



4. Click "Primary Setup"



5. Make sure "WAN Type" is set to "Dynamic IP Address" and enter the host name given to you by your ISP (i.e. CX123456).



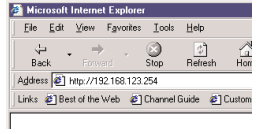
6. Click "Save" and then click "Reboot."

7. When prompted to reboot now, click "OK."

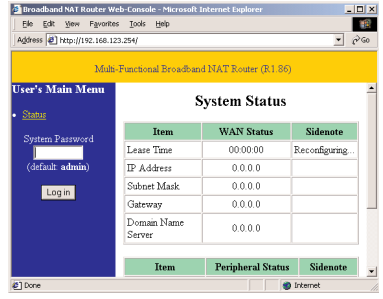
B. Your ISP may require a domain name.
If your ISP does not require a domain name, you must leave this field blank.
To enter your domain name:

1. Open your web browser (i.e. Internet Explorer or Netscape Navigator).

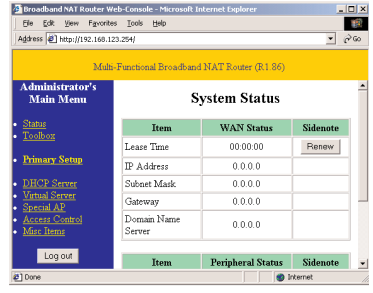
2. In the "Location" field (for Netscape) or "Address" field (for Internet Explorer), type "http://192.168.123.254" and press <ENTER>.


Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Forward Stop Refresh
Address http://192.168.123.254
Links Best of the Web Channel Guide Custom

3. In the "System Status" page of the Barricade web console, type your password in the "System Password" field (default is "admin") and click the "Log In" button.

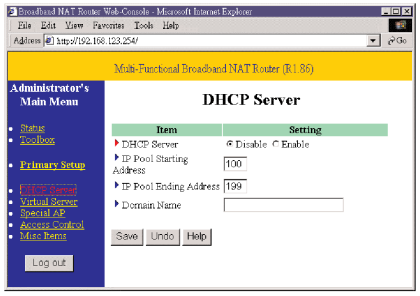


4. Click "DHCP Server."



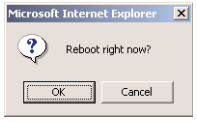
English

5. In the “Domain Name” field, key in the domain name given to you by your ISP (i.e. xxx.yyy.home.com).



6. Click “Save” and then click “Reboot.”

7. When prompted to reboot now, click “OK.”

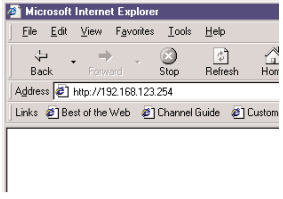


C. You may need to have your Barricade clone the MAC address of your Ethernet adapter. Your ISP may register your MAC address (a MAC address is a serial number that is unique to every Ethernet adapter), and your Barricade needs to pass on that address to your ISP. To do so:

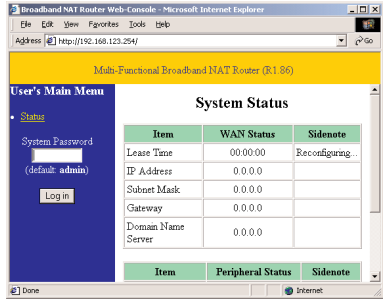
1. Make sure that you are using the computer and Ethernet adapter that was originally connected to your ISP.

2. Open your web browser (i.e. Internet Explorer or Netscape Navigator).

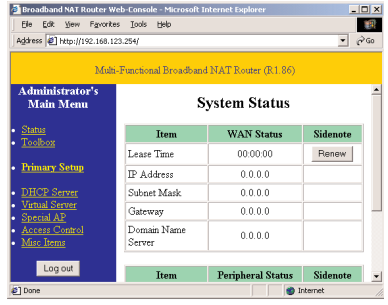
3. In the “Location” field (for Netscape) or “Address” field (for Internet Explorer), type “http://192.168.123.254” and press <ENTER>.



4. In the ”System Status” page of the Barricade web console, type your password in the “System Password” field (default is “admin”) and click the “Log In” button.

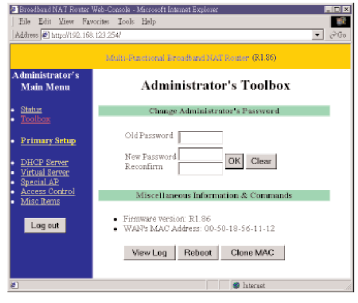


5. Click “Toolbox”.

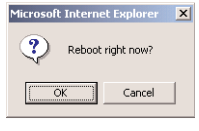


6. Click the “Clone MAC” button.

7. Click “Save” and then click “Reboot.”



8. When prompted to reboot now, click “OK.”



English

English

D. If you use DSL, you may need to reconfigure your Barricade for a PPPoE connection (Point to Point Protocol over Ethernet). To reconfigure, go to the section labeled "Configuring Your Barricade for a DSL Connection with a Log-In Name and Password" on page 19.

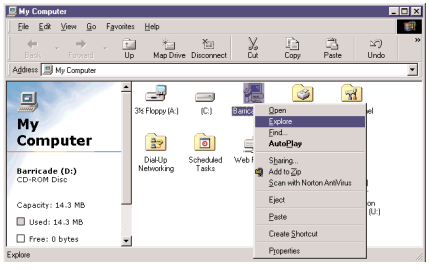
E. If you use a totally plug and play ISP (i.e. Time Warner or Road Runner in some areas) you may need to shut down and restart your cable modem after you've finished configuring the Barricade.

Reading the Manual

When I click on "User's Manual" when the CD starts up, nothing happens

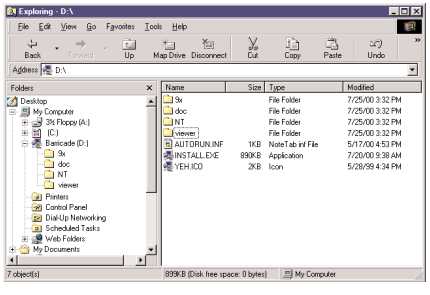
You may need to install the viewer first.
To install the viewer software:

1. Double-click the "My Computer" icon on your Windows desktop.

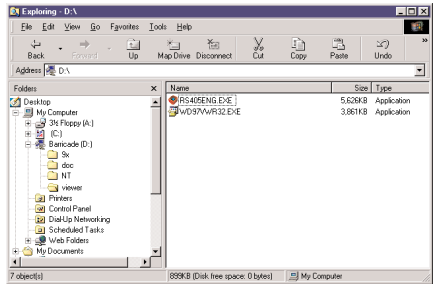


2. Right-click the CD-ROM icon and select "Explore".

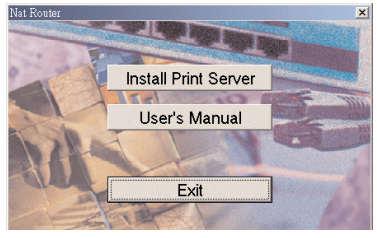
3. Double-click the "viewer" folder.



4. Double-click the file "RS405ENG.EXE." This will start the installation of the viewer software. Follow the screen prompts to complete the installation.



5. When the installation program is finished, remove and reinsert the CD, and then click the "User's Manual" button.



English

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